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Molluscum Contagiosum of the Lower Lip: Report of a Case

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INTRODUCTION

Molluscum contagiosum is a viral disease of the skin seen primarily in children.¹ The causative organism is a pox virus of the same grouping as smallpox, cowpox and others.²

The disease was first described by Bateman in 1814 although a clear account of it appeared nearly 20 years prior to that time in a notebook belonging to Edward Jenner. Interestingly, these original handwritten pages are still on display in the library of the Royal College of Physicians in England.³

The viral nature of the disease was established in 1905 although the consistent failure to replicate in tissue culture has somewhat clouded the issue.⁴ It has, however, been characterized by light and electron microscopy.⁵

The lesions of molluscum contagiosum are commonly seen in the anogenital area and in adults a venereal transmission is considered highly likely.⁶⁻⁷ Lesions have also been reported on the trunk, thighs, arms, neck, face and scalp.^{6,8} Occurrence in the eyelid and periocular areas is quite common and may in some instances result in ophthalmological complications.⁹ Eruptions have been reported following systemic administration of corticosteroids and antimetabolites.¹⁰

Typical lesions present as raised, pearly papules with an umbilicated

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central area. Bidigital manipulation will usually result in the extrusion of a semisolid, caseous material which consists of degenerated keratin and epithelial cells containing the viral inclusion bodies known as Lipschutz granules.⁶

Treatment usually consists of curettment or excision. Cryotherapy, trichloroacetic acid and podophyllin administration have also been successfully utilized.¹¹

The present case is considered to be of interest due to its occurrence on the lower lip, the differential diagnostic problem and the paucity of information in the dental literature relating to molluscum contagiosum.

CASE REPORT:

A 25-year-old caucasian male presented for a dental examination and evaluation of a lesion located on the junction of the vermillion surface and skin in the midline of the lower lip. The lesion was raised, firm, round, normal to pearly in color and measured approximately .7 cm. across its surface (Fig 1). The patient related that it had been present for approximately two months and was presently of a stable size. His past medical history was within normal limits and no similar lesions were noted on the face or elsewhere. He denied the possibility of orogenital sexual transmission and self-innoculation was ruled out on the basis of a negative history. An excisional biopsy was performed in November of 1978. Histologic examination revealed a lesion covered on its superior surface by stratified squamous epithelium. Extending from the external surface into the underlying connective tissue were epithelial lobules containing in their central areas tightly packed squamous cells containing large, intracytoplasmic inclusion bodies which had largely displaced the cell nuclei (Fig 2). The outermost cells of the lobules were in the process of being exfoliated.

Deep to the lobules the epithelial cells did not display viral inclusions. Staining characteristics of the viral inclusion bodies varied from eosinophilia in the deeper epithelium to basophilia in the superficial cells. Little inflammation was noted. One large pseudocyst was present which was filled with exfoliated cellular and viral debris (Fig 3): Diagnosis: molluscum contagiosum of the lip.

Electron microscopic evaluation revealed in detail the honeycomb pattern of the molluscum bodies. These inclusion bodies most likely represent a degenerative keratinaceous product of the stratified squamous epithelium induced by the presence of the Poxviridae virus.

Further support for this concept was noted by the appearance of a keratin-like layering within the empty lacunae of several molluscum bodies. (Fig 4).

DISCUSSION:

Molluscum contagiosum is a viral disease of the skin felt to be contagious in nature and occurring most commonly in the anogenital area of children. This case is of interest due to the rare occurrence on the lip in an adult with no other lesions or history of contact.

The DNA which contains the virus of molluscum contagiosum resides within the rounded hyaline masses or Henderson-Paterson bodies found predominately within cells of the stratum spinosum segment of the epithelium. These molluscum bodies measure approximately 35 microns in diameter. The tenant virus itself has dimensions of approximately 300 X 200mm. Its morphology strongly resembles the "brick-shaped" capsule of the variola, vaccinia, and cowpox viruses of the family Poxviridae.

A clinical differential diagnosis might include such entities as fibroma, neuroma, nevus, minor salivary gland tumor, mucoccele, xanthoma and many others including the basal cell carcinoma and keratoacanthoma. The diagnosis of molluscum contagiosum was a distinct surprise. To our knowledge only one

other such lesion of the perioral or intraoral area has been reported in the dental literature.¹³

The patient did not suffer recurrence following excision and his experience can presumably be considered an isolated incident.

SUMMARY

A rare case of molluscum contagiosum of the lower lip is presented. Its clinical and microscopic features are discussed and a differential diagnosis is suggested.

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Captions

- Figure 1. Lesion near midline of lower lip at junction of the vermillion surface and skin of chin.
- Figure 2. Photomicrograph showing epithelial lobules containing intracytoplasmic inclusion bodies and cellular segments in process of exfoliation. (Hematoxylin and eosin stain. Magnification X 300)
- Figure 3. Photomicrograph showing pseudocyst with intraluminal cellular and viral debris. Note viral bodies forming in lower epidermis. (Hematoxylin and eosin stain. Magnification X 300)
- Figure 4. S.E.M. photomicrograph demonstrates the honeycomb arrangement (arrow) of the molluscum bodies (mb) formed by the underlying stratified squamous epithelium (sse). Magnification X 800.

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